

## MATERIAL SAFETY DATA SHEET

## **BOSCH BLUE**

Version Number 1.0 Revision Date 02/27/2003 Page 1 of 7 Print Date *11/10/2011* 

## 1. PRODUCT AND COMPANY IDENTIFICATION

## POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (770) 271-5902
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	BOSCH BLUE
Product code	:	CC10032240
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	5 - 10

## **3. HAZARDS IDENTIFICATION**

### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

## POTENTIAL HEALTH EFFECTS

<b>Routes of Exposure:</b>	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation Ingestion	<ul> <li>Resin particles, like other inert materials, can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> </ul>
Eyes	<ul> <li>Resin particles, like other inert materials, are mechanically irritating to eyes.</li> </ul>
Skin	: Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.





#### **BOSCH BLUE** Version Number 1.0 Page 2 of 7 Revision Date 02/27/2003 Print Date 11/10/2011 **Medical Conditions** : None known. Aggravated by Exposure: 4. FIRST AID MEASURES Inhalation Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice. Do not induce vomiting without medical advice. When symptoms Ingestion : persist or in all cases of doubt seek medical advice. Eyes : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention. Skin : Wash off with soap and plenty of water. If skin irritation persists seek medical attention. **5. FIRE-FIGHTING MEASURES** Flash point : Not applicable Flammable Limits Upper explosion limit Not applicable : Lower explosion limit Not applicable : Autoignition temperature Not relevant : Suitable extinguishing media : Carbon dioxide blanket, Water spray, dry powder, foam. Special Fire Fighting Fullface self-contained breathing apparatus (SCBA) used in positive : Procedures pressure mode should be worn to prevent inhalation of airborne contaminants. Unusual Fire/Explosion None • Hazards 6. ACCIDENTAL RELEASE MEASURES Personal precautions : Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls. Environmental precautions Should not be released into the environment. The product should not : be allowed to enter drains, water courses or the soil. Methods for cleaning up Clean up promptly by sweeping or vacuum. Package all material in : plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods. 7. HANDLING AND STORAGE Handling Take measures to prevent the build up of electrostatic charge. Heat · only in areas with appropriate exhaust ventilation.

## MATERIAL SAFETY DATA SHEET

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rsion Number 1.0 vision Date 02/27/2003			Print D	Page 3 c ate 11/10/20
Storage		Leep containers dry and tightly nd contamination. Keep in a c		absorption
8. 1	EXPOSURE	<b>CONTROLS / PERSONAL</b>	PROTECTION	
Respiratory protection	: N	lo personal respiratory protect	ive equipment normally r	equired.
Eye/Face Protection	: S	afety glasses with side-shields	S.	
Hand protection	: P	rotective gloves.		
Skin and body protection	: L	Long sleeved clothing.		
Additional Protective Measures	: S	Safety shoes.		
General Hygiene Considerations		landle in accordance with good Vash hands before breaks and		afety practice.
Engineering measures		leat only in areas with appropr ppropriate exhaust ventilation		Provide
Exposure limit(s)				
Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
Carbon black	3.5 mg/m3	PEL:	Total dust. as carbon	OSHA Z1

	_		black	
Titanium dioxide	10 mg/m3	Time Weighted Average	Dust.	ACGIH
		(TWA):		
Titanium dioxide	15 mg/m3	PEL:	Total dust.	OSHA Z1

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Appearance
Color
Odor
Melting point/range
Boiling Point:
Water solubility

: Solid : Pellets : BLUE : Very faint : Not determined : Not applicable : Insoluble

Evaporation rate Specific Gravity Bulk density Vapor pressure Vapor density pН

: Not applicable. Not determined : Not established : : Not applicable : Not applicable : Not applicable

## **10. STABILITY AND REACTIVITY**

Stability

: Stable.

Hazardous Polymerization

: Will not occur.



### MATERIAL SAFETY DATA SHEET

## **BOSCH BLUE**

Version Number 1.0 Revision Date 02/27/2003		Page 4 of 7 Print Date 11/10/2011
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

### **11. TOXICOLOGICAL INFORMATION**

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

LC50 / LD50

This product contains the following components which in their pure form have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity:

This product contains the following components which in their pure form have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
1333-86-4	Carbon black	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

#### **Additional Health Hazard Information:**



MATERIAL SAFETY DATA SHEET

## **BOSCH BLUE**

Version Number 1.0	Page 5 of 7
Revision Date 02/27/2003	Print Date 11/10/2011

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

12. ECOLOGICAL INFORMATION
: Not readily biodegradable.
: Chemicals are not readily available as they are bound within the matrix of the polymer.
: Chemicals are not readily available as they are bound within the matrix of the polymer.
: No data available.
13. DISPOSAL CONSIDERATIONS
: Like most thermoplastics the product can be recycled. Where possible, recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
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14. TRANSPORT INFORMATION
: Refer to specific regulation.
: Refer to specific regulation.
: Refer to specific regulation.
15. REGULATORY INFORMATION
: Classified as hazardous based on components.



MATERIAL SAFETY DATA SHEET

## **BOSCH BLUE**

Version Number 1.0 Page 6 of 7 Revision Date 02/27/2003 Print Date 11/10/2011 **TSCA Status** All components of this product are listed on or exempt from the TSCA : Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302) Not applicable : This product does not contain a substance listed by California Prop 65. California Proposition 65 SARA Title III Section 302 Extremely Hazardous Substance Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable Canadian Regulations: WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 1333-86-4 DSL : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt. National Inventories: Australia AICS : Listed. China IECS : Listed. Europe EINECS Not determined. : Japan ENCS : Listed. Korea KECI : Listed. **Philippines PICCS** : Listed.



MATERIAL SAFETY DATA SHEET

## **BOSCH BLUE**

Version Number 1.0 Revision Date 02/27/2003 Page 7 of 7 Print Date 11/10/2011

## **16. OTHER INFORMATION**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.